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NOTES FOR DESIGNER: (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)

1. WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM CIVIL POC.
2. REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL REQUIREMENTS:
A. ENGINEERING MANUAL, CIVIL CHAPTER.
B. SPEC 31 2000, GRADING, EXCAVATING, AND TRENCHING.
C. SPEC 33 1000, SITE WATER DISTRIBUTION.
D. CIVIL DRAWING ST-G30GEN-1, BOLLARD DETAIL.
E. MECH DRAWING ST-D2020-1, SITE/BUILDING WATER COMPONENT DIAGRAM.
3. DO NOT SEPARATE THE FIRE HYDRANT FROM THE SHUT-OFF VALVE WITH A BARRIER (FENCE, ETC).
4. FIRE HYDRANT SHALL BE LOCATED WITH A MINIMUM 5 FEET CLEAR AREA ON SIDES AND BACK, I.E. LANDSCAPING, FENCE, ETC. PUMPER CONNECTION SIDE SHALL BE FREE OF ANY OBSTRUCTIONS.
5. IF FIRE HYDRANTS ARE LOCATED WITHIN A POTENTIAL RELEASE SITE (PRS) CONSULT WITH ENV-WQH, WATER QUALITY AND HYDROLOGY GROUP.
6. IF REQUIRED, TWO OR FOUR BOLLARDS WILL BE PLACED EQUALLY AROUND HYDRANT AT 2'-0" FROM HYDRANT. BOLLARDS FOR PROTECTING WATER SERVICES WILL BE 4" STEEL PIPE 3'-6" ABOVE GRADE AND 2'-6" BELOW GRADE. CONCRETE BASE WILL PROVIDE 4" OF CONCRETE ALL AROUND PIPE.

DRAWING DEVELOPED FOR ML-3 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

ADTS - ENGINEERING DIVISION

ENGINEERING STANDARDS MANUAL

FIRE HYDRANT DETAIL

NOTES

BUILD: X	TA-X	DATE	6-28-99
SUBMITTED	APPROVED FOR RELEASE	CHECKED	W. SMITH
DISCIPLINE POC: E. WOH	STANDARDS MANAGER: TOBIN ORICH	DATE	6-28-99

Los Alamos NATIONAL LABORATORY	PO Box 1663 Los Alamos, New Mexico 87545	REVIEWER: LARRY BAYS	DATE:	2	OF	2
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PROJECT ID:	DRAWING NO:	REV
CHAPTER 3	ST-G3010-4	2